Washington State Department of Transportation

Correlation - Nuclear Gauge to Core Density

Contract Number	SR Number	Mode ☐ Backscatter ☐ Direct	
Section			
Pit Number	ACP Class	Lift Thickness	Project Engineer

	(1) Station/Offset	(2) Nuclear Gauge Density #/ft³	(3) Core Density #/ft³	(4) Density Ratio
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

(1) The ten test points can represent either the first two control lots or ten points within the first control lot (Attach the Compaction Control Report).

(2) Nuclear gauge density tests must be taken the day of paving.

(3) Cores must be taken at the same location as the nuclear density readings, the day following paving.

(4) Density Ratio = $\frac{\text{Core Density}}{\text{Nuclear Gauge Density}}$

(5) Calculation of Gauge Correlation Factor (GCF)

Add ten Density Ratios

GCF = $\frac{\text{Sum of Density Ratios}}{10} = \frac{\qquad}{10} = \qquad$

Date of Paving	Date of Coring	Date Project Office Notified of Gauge Correlation Factor

By _____
Signature

Distribution: ☐ Region Materials Lab ☐ Project Engineer ☐ State Materials Lab

DOT Form 350-112 EF
Revised 3/2002